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fax or e-mail, whenever such suggestions are within the Examiner's discretion as an aid to placing the claims in order for allowance in a timely manner.

Election/Restrictions

Applicant acknowledges the Examiner's treatment of Applicant's election. The withdrawal of claims 1-17 and 28-62 is made without prejudice to the filing of divisional applications thereon.

Point 3: Oath/Declaration:

The Examiner noted that the oath is defective for naming the incorrect priority filing. Applicant encloses herein a duly signed, corrected oath to replace the prior oath.

Point 5: In the Drawings:

Attached please find a replacement Fig. 1, which shows a simple flute, well known in the prior art, on the outside surface of the collet. Such a modification is manifest from the written description and thus, no new matter is added thereby. If the Examiner disagrees, Applicant invites the Examiner to suggest a form of known tool-bit, or other convention to indicate that the collet can comprise a tool-bit. As for claims 25 and 27, these claims have been amended so that they no longer positively recite a powered instrument. Therefore, the amendment to the drawings to include a powered instrument is no longer required.

Points 6-8: Objections to the Specification:

Concerning the Examiner's objections to the Disclosure, the specification has been amended to correct the serial no of the priority application and to more precisely define "nitinol". Concerning the Examiner's subpoint c, no amendment is required. The bow, or bend of a bone that is straight has an infinite radius and such bones are substantially present in many species. The *bow* of the bone mentioned in the

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specification has a more limited radius, namely, 90-inch. If this is unclear to the Examiner, Applicant invites the Examiner to contact the Undersigned.

Further, Applicant attaches a replacement abstract with the objectionable wording removed.

In addition, the Examiner objected to the specification under 37 CFR 1.71 and 1.75(d)(1) because he alleges the detailed description of the elected species fails to provide proper antecedent basis for enumerated elements. Concerning subpoint (a), the specification has been amended accordingly on page 7. Concerning subpoint (b), the paragraph beginning on line 27 has been amended. Concerning subpoint (c), the paragraph beginning on page 9, line 22 has been appropriately amended. Concerning subpoint (d), the specification has been appropriately amended in the paragraph beginning on page 7, line 9. Further, claims 25 and 26 have been amended to recited a cutting tool *fitting*, for consistency with the amended specification.

Finally, regarding Point 9, the "the" has been deleted in compliance with the Examiner's suggestion.

No new matter has been entered hereby.

Points 10-11: Rejection under 112. Second Paragraph:

Concerning the Examiner's rejection under 112, regarding the term "super" and also the phrase "super elastic activation in the shaft", Applicant traverses the rejection on the grounds that the term is used in a form commonly understood in the art, and not as a relative term. As for the Examiner's first assertion, the term "super" cannot be read separately from the compound word "super-elastic" in materials science, a well-understood term. The Examiner is invited to perform, for example, a Google™ search of the compound words "super-elastic" and alloy. He will find approximately 3200 references thereto. The use of the compound word "super-elastic" is therefore definite and clearly understood by the person of ordinary skill in the art. As for the Examiner's second assertion, the meaning of the phrase "a super elastic activation in the shaft" is clearly defined in the specification, particularly in light of the incorporation of the text

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in the specification duly incorporated by reference in the first paragraph of the present application. Acknowledgement of this fact is respectfully requested.

Points 12-14: 102 Rejections based on Bartholomew US 3,610,056 and Belef et al US 6,078,831:

The Examiner rejected claims 18-23 & 25-27 under 35 U.S.C. §102(b) as being anticipated by Bartholomew. Applicant traverses this rejection in light of the clear and unambiguous meaning of the term “super-elastic” in independent claim 18. Clearly, the claimed element of “an elongated shaft member [being] made of a super-elastic alloy, received within the opening” is lacking in Bartholomew. Lacking this element, a 102 rejection cannot stand. Acknowledgement of this fact is respectfully requested.

The Examiner has further rejected claims 18-27 under 102(e) as being anticipated by Belef, asserting that Figs 12 and 13 of Belef show a torque-transmitting coupling assembly comprising similar elements to that of Applicant's invention. However, the cited portion of Belef which the Examiner uses to support his contention that Belef anticipates the instant invention must be more closely read. It is the telescoping portion 48 of the drive shaft 44 which is preferably formed of a nitinol tube, not the drive shaft 44 itself. Although the Belef disclosure states that the drive shaft 44 “may be composed of a single tubular member (not shown), or preferably, it may be several elements attached together”, the fact that one element is stated to be made of nitinol, does not imply that, when the entire drive shaft is made of a “single tubular member”, it is made of nitinol, for the simple reasons that the use of nitinol is “preferable” and not required. In other words, an equally plausible interpretation of Belef is that, when nitinol is used, the drive shaft 44 is a composite drive shaft, one portion being made of nitinol and another not. Otherwise, nitinol is not used. In fact, the application is silent on the composition of the drive shaft when it is made as a “single tubular member”, and it is not shown. Further, all embodiments shown show the telescoping member 48 as a solid tube and the remaining part of the drive shaft as a hollow, coiled member. In such a case, even if the spiral wound member were made of

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nitinol, the contact between the "collet" 116 and the spiral wound member would be spiral, line contact and not substantially surface-to-surface, as required in Applicant's invention. Further, Belef is ambiguous in that it describes a separate "drive cable 50" which is preferably "counterwound" which appears to be that which the "collet" 116 is connected (see fig. 3). In any case, further, no super-elastic activation is discussed. It is respectfully submitted therefore that Belef does not anticipate Applicant's invention because it does not clearly show super-elastic activation between the collet and the drive shaft. This being the case, it is believed that the 102(e) rejection is overcome. Acknowledgement of this fact is respectfully requested.

Points 15-16: Rejection under §103 based on Krivec et al US 5,746,298 in view of Sohn US 5,988,171:

The Examiner rejected claims 18-27 under 103(a) as being unpatentable over Krivec in view of Sohn, asserting that Figures 1-4 "show a torque-transmitting coupling assembly comprising: a split collet member 40 having an exterior surface and an opening; an elongated shaft member 30, 65 received within the opening; a sleeve member 45 having a bore that receives the exterior surface of the collet 40; and a cutting tool-bit or powered instrument (see col. 4, line 35) connected to the collet...." Applicant traverses this rejection on the grounds that Krivec's collet is nothing more than a sleeve with cantilevered fingers which slidably grips a hexagonal surface 33, locking until a prescribed torque is reached and then sliding to relieve the torque (see abstract). Note that such torque limiting feature is always present, even when the screw driver is torqued in a direction so as to loosen a fastener, which is indeed a non-torque limiting mode, but *not* because of the collet—rather, because of an alternate, positive locking, classic pawl and catch mechanism. Further, Krivec relates to the field of "torque-limiting drivers", not fixed coupling devices and is thus not analogous art. Still further, Krivec makes no mention of a super-elastic alloy. Concerning Sohn, given that there is no teaching or suggestion in Krivec of a collet locking in a *fixed* relationship, it cannot be combined with Krivec to teach the invention. Further, Sohn, in the section cited by the Examiner mentions a "flexible, nonlinear drive shaft", but

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not a super-elastic shaft. Nevertheless, even if Sohn mentioned a super-elastic material, Sohn could not be combined with Krivec because Sohn lacks the necessary nexus, namely, Sohn lacks the other elements of claim 18, namely, a split collar and sleeve which cause super-elastic activation. To continue to insist on making this combination is believed to amount to impermissible hindsight reconstruction of the invention.¹ In light of the above remarks, Applicant believes that the application is now in condition for allowance. Acknowledgement of this fact is respectfully requested.

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Point 17: Conclusion

Applicant has made a diligent effort to advance the prosecution of this application by amending claims, and by pointing out herein with particularity how the claims now presented are patentably distinct from the prior art of record. Therefore, Applicant respectfully submits that the claims, as amended, are now in condition for allowance. No new matter has been entered by this amendment. Any limitations to the claims are made solely for the purpose of expediting the prosecution of the application and, unless otherwise expressly stated, are not made to narrow, vis-à-vis the prior art,

¹ "Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation ... *In re Dembiczak*, 50 USPQ2d ____ (Fed. Cir. 1999), Case No. 98-1498 (Serial No. 08/427,732) (*emphasis added*). «When determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.» *In re Beattie*, No. 91-1396, slip op. at 7 (Fed. Cir. Sept. 4, 1992) (affirming the rejection of claims to a diatonic/chromatic scale marker intended to rest on the keys of a piano as unpatentable under 35 U.S.C. § 103 (1988)) (quoting *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F. 2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984)). «The Commissioner bears the burden of showing that such knowledge provided some teaching, suggestion, or motivation to make the particular combination that was made by the applicant.» *In re Vaack*, No. 91-1120, slip op. at 10 (Fed. Cir. Oct. 21, 1991) (reversing the PTO Board's affirmation of the examiner's rejection of certain claims under § 103, and citing *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988)).

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the scope of protection which any subsequently issuing patent might afford. Again, if the Examiner has further questions, he is invited to contact the undersigned at phone 011-4122-747-7849, fax at 011-4122-346-8960 (Geneva is 6 hours ahead of Eastern Std Time), or e-mail at patents@bugnion.ch.

Applicant petitions the Commissioner for an Extension of Time under 37 CFR §1.136 for a period of ONE month and the Undersigned authorizes the Commissioner to charge any fee or credit any overpayment of any fee under 37 CFR §1.16 and §1.17 which may be required in this application to the deposit account of BUGNION S.A., no. 50-0800.

Respectfully submitted,

Date : Nov 8, 2004


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Enclosure: Replacement Figure 1
Replacement declaration

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